UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,890	12/30/2003	Jeff Scott Eder	AR - 64	7418
53787 ASSET TRUST	7590 08/05/200 Γ. INC.	EXAMINER		
2020 MALTBY		MANSFIELD, THOMAS L		
	SUITE 7362 BOTHELL, WA 98021			PAPER NUMBER
			3623	
			MAIL DATE	DELIVERY MODE
			08/05/2008	PAPER

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)			
	10/748,890	EDER, JEFF SCOTT			
Office Action Summary	Examiner	Art Unit			
	THOMAS MANSFIELD	3623			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
Responsive to communication(s) filed on <u>26 Ar</u> This action is <b>FINAL</b> . 2b) ☑ This     Since this application is in condition for allowar closed in accordance with the practice under E	action is non-final. nce except for formal matters, pro				
Disposition of Claims					
4) ☐ Claim(s) 1-28 is/are pending in the application. 4a) Of the above claim(s) 20-22 is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-19, 23-28 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or Application Papers  9) ☐ The specification is objected to by the Examine 10) ☐ The drawing(s) filed on is/are: a) ☐ access	r election requirement.	≣xaminer.			
Applicant may not request that any objection to the orection Replacement drawing sheet(s) including the correction 11). The oath or declaration is objected to by the Expression of the contraction is objected to be the Expression of the contraction of the contr	drawing(s) be held in abeyance. See on is required if the drawing(s) is obj	e 37 CFR 1.85(a). lected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.					
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date 22 November 2007, 28 April 2008, 9 June	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 2008. 6) Other:	nte			



Application No.

Art Unit: 3623

#### **DETAILED ACTION**

#### **Status of Claims**

- 1. This First Office action is in reply to the Response to Election/Restriction filed on 26 April 2008.
- **2.** Claims 1, 3, 4, 6, 9-23, 25, 27, and 28 have been amended.
- 3. Claims 1-28 are subject to election/restriction.
- **4.** Claims 1-19 and 23-28 are currently pending and have been examined.

#### Election/Restrictions

Claims 20-22 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made without traverse in the reply filed on 26 April 2008.

### Claim Objections

6. Claims 20-22 are objected to because of the following informalities: Since an election of Claims 1-19 and 23-28 were due to the restriction requirement, Claims 20-22 should each be indicated as "Withdrawn-currently amended". Appropriate correction is required.

# Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Application/Control Number: 10/748,890

Art Unit: 3623

8. Claims 23-28 are rejected under 35 U.S.C. 101 based on Supreme Court precedent, and recent Federal Circuit decisions, the Office's guidance to examiners is that a § 101 process must (1) be tied to another statutory class (such as a particular apparatus) or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. Diamond v. Diehr, 450 U.S. 175, 184 (1981); Parker v. Flook, 437 U.S. 584, 588 n.9 (1978); Gottschalk v. Benson, 409 U.S. 63, 70 (1972); Cochrane v. Deener, 94 U.S. 780,787-88 (1876).

Page 3

An example of a method claim that would <u>not qualify</u> as a statutory process would be a claim that recited purely mental steps. Thus, to qualify as a § 101 statutory process, the claim should positively recite the other statutory class (the thing or product) to which it is tied, for example by identifying the apparatus that accomplishes the method steps, or positively recite the subject matter that is being transformed, for example by identifying the material that is being changed to a different state. Here, applicant's method steps, fail the first prong of the new Federal Circuit decision since they are not tied to another statutory class and can be preformed without the use of a particular apparatus. Thus, claims 23-28 are non-statutory since they may be performed within the human mind.

9. Claims 1-19 and 23-28 are rejected under 35 U.S.C. 101 because Claims 1, 11, and 23 recite steps for optimizing one or more aspects of organization return but do not produce useful, concrete and tangible results.

Under the statutory requirement of 35 U.S.C. § 101, a claimed invention must produce a useful, concrete, and tangible result. For a claim to be <u>useful</u>, it must yield a result that is specific, substantial, and credible (MPEP § 2107). A <u>concrete</u> result is one that is substantially repeatable, i.e., it produces substantially the same result over and over again (*In re Swartz, 232 F.3d 862, 864, 56 USPQ2d 1703, 1704 (Fed. Cir. 2000)*). In order to be <u>tangible</u>, a claimed invention must set forth a practical application that generates a real-world result, i.e., the claim must be more than a mere abstraction (*Benson, 409 U.S. at 71-72, 175 USPQ at 676-77*). (Please refer to the

"Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" for further explanation of the statutory requirement of 35 U.S.C. § 101.)

The claims do not produce a useful result because the claims do not provide a specific utility. Per MPEP 2107.01 A, a specific utility is "specific to the subject matter claimed and can "provide a well-defined and particular benefit to the public." As the claims are currently recited, they seem to apply to the general problem of risk and return management for an organization, but fail to disclose a more specific utility for the optimizing of an organization return.

The claims are not concrete because one of ordinary skill in the art would not be able to repeat the steps and produce the same tangible results as the <u>establishing</u> of a detailed data dictionary, <u>integrating</u>, <u>transforming</u>, <u>quantifying</u>, and <u>simulating</u> steps could be performed by different individuals and achieve different outcomes since it is not clear what the scope is of optimizing one or more aspects to obtain organization return (i.e., are there mathematical calculations or algorithms to perform these steps?)

The claims do not produce tangible results because the claims just solve for a simulation of an organization financial performance and optionally identifies one or more item level changes that will optimize a total organization risk and a total organization value but do not actually assign any values or results in a real world environment. The last limitation just states a simulating step to identify changes that will optimize one or more aspects of an organization return and an optional identification step for one or more item level changes that will optimize but does not specifically provide any indication or result as to how and/or what is actually optimized with regard to organization return. Claims 2-10, 12-19, and 24-28 are also rejected for the same reasons since they depend from Claims 1, 11, and 23.

Art Unit: 3623

# Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness

rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be not and the prior art are such that the subject matter as a whole would have been obvious

patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said

subject matter pertains. Patentability shall not be negatived by the manner in which the invention

was made.

11. Claims 1-19 and 23-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peters et

al. (Peters) (U.S. Pub. No. 2003/0208427) and in view of Messmer et al. (Messmer) (U.S. Pub.

No. 2001/0039525.

With regard to Claims 1, 11, and 23, Peters teaches a system, computer-readable

medium, and method for optimizing one or more aspects of organization return comprising

(automated investment advisory system, method, software component for constructing an

optimized investment portfolio) (see at least paragraphs 0020-0022): a plurality of computers

connected by a network each with a processor having circuitry to execute instructions (distributed

computer network); a storage device available to each processor with sequences of instructions

stored therein, which when executed cause the processors to (the host server processes the

investment package to determine an optimized investment portfolio) (see at least paragraph

0021):

Art Unit: 3623

establish a detailed data dictionary (risk profile, investment portfolio) as
required to define a plurality of cells (risk and return dimension for selected
asset classes) within a matrix of market value (correlation matrixes) and a
plurality of processing stages (query-driven software processor uses a series of
tables) (see at least paragraphs 0056-0058),

- integrate (integrate) a plurality organization related data (relational database) from a plurality of organization systems (with the advisor's own trading platforms and investment advisory services) in accordance with the matrix cell definitions (asset classes) (see at least paragraphs 0056-0060),
- transform at least part of said data into a risk impact summary and a return impact summary (risk and return dimensions, assign a risk rating and expected return) (see at least paragraphs 0024-0025) for each of one or more elements of value (input values, output value) and one or more external factors (asset classes and their respective correlations) (see at least paragraph 0025),

Peters does not specifically teach quantify an impact by item of the elements of value, the external factors and one or more risks on an organization market value by a segment of value by analyzing said data with a series of models that use the impact summaries as an input. Messmer teaches quantify an impact by item of the elements of value (asset valuation scenario), the external factors (Collection score) and one or more risks on an organization market value (Stock/Margin Loans) by a segment of value by analyzing said data (segmentation of the asset attributes) with a series of models that use the impact summaries as an input in analogous art of finding value and reducing risk for the purposes of, "attributes which heavily influence/generate risk" (see at least paragraphs 0078-0081 and Table A).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the finding value and reducing risk method as taught by Messmer with the automated investment advisory method of Peters. One of ordinary skill in the art would have been motivated to do so for the benefit of establishing the confidence level with which statements can be made about the total recoveries in each segment (Messmer, paragraphs 0078-0081).

Peters does not specifically teach simulating an organization financial performance using said matrix to identify one or more changes at the item level that will optimize one or more aspects of an organization return where the system optionally identifies one or more item level changes that will optimize a total organization risk and a total organization value. Messmer teaches simulating an organization financial performance (Analysis 160 simulates a competitive environment with other companies having various financial capabilities) using said matrix (preference matrix) to identify one or more changes at the item level that will optimize (computerized stochastic optimization) one or more aspects of an organization return (risk/return tradeoffs) where the system optionally identifies one or more item level changes that will optimize a total organization risk and a total organization value (automatic valuation procedure 40 and sampling procedures 34 attempting to find extra value in various assets or categories of assets) (see at least paragraphs 0057-0070) in analogous art of finding value and reducing risk for the purposes of, "to provide the best estimate of value at any point in the discovery process" (see at least paragraphs 0070).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the finding value and reducing risk method as taught by Messmer with the automated investment advisory method of Peters. One of ordinary skill in the art would have been motivated to do so for the benefit of to provide the best estimate of value at any point in the discovery process" (see at least paragraphs 0070).

With respect to Claims 2,12, and 24, Peters teaches where an organization is a single product, a group of products, a division, a company, a multi-company corporation, a value chain or a collaboration (specific investment products, portfolio) (see at least paragraphs 0024-0026).

With respect to Claims 3, 13, and 25, Peters teaches where one or more aspects of an organization return are selected from the group consisting of alliance return, brand return, channel return, content return, contingent liabilities, customer return (portfolio return), customer relationship return, current operation return, derivative return, employee return, employee relationship return, enterprise return, external factor return, event return, information technology return, intellectual property return, investment return (financial goals), knowledge return, market sentiment return, market return, market volatility, partnership return, process return, production equipment return, product return, real option return, technology return, vendor return, vendor relationship return, and combinations (portfolio) thereof (savings goal, education savings, home purchase) (see at least paragraphs 0025-0027).

With respect to Claims 4 and 15, Peters teaches *optionally supports securities* valuation (securities brokers) (see at least paragraph 0070).

With respect to Claims 5 and 14, Peters does not specifically teach *supports financial* performance management by segment of value, element of value, enterprise and combinations thereof. Messmer teaches supports financial performance management by segment (segmentable financial instrument assets, hierarchical segmentation module **234**) of value (values, valuation), element of value (market value cluster), enterprise and combinations thereof (cluster valuation) in analogous art of finding value and reducing risk for the purposes of, "segments the entire portfolio of assets into bins based on critical variables selected by analysts" (see at least paragraphs 0095-0104).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the finding value and reducing risk method as taught by Messmer with the automated investment advisory method of Peters. One of ordinary skill in the art would have been motivated to do so for the benefit of "giving an indication of how good the predictive capabilities of the model are within each portfolio segment" (Messmer, paragraph 0104).

With respect to Claims 6 and 16, Peters teaches where **one or more** elements of value are selected from the group consisting of: alliances, brands, channels, content, customers, customer relationships, employee relationships, information technology, intellectual property, knowledge, partnerships, processes, technology, vendors and vendor relationships (financial intermediaries, investment advisors, mutual fund companies) (see at least paragraph 0070).

With regard to Claims 7, Peters does not specifically teach where the elements of value can be clustered into sub-elements of value for more detailed analysis. Messmer teaches where the elements of value can be clustered into sub-elements of value for more detailed analysis in analogous art of finding value and reducing risk for the purposes of, "fuzzy-C means clustering ("FCM"), Clusters 52 and 54 that are, in turn, further sub-divided" (see at least paragraph 0024).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the finding value and reducing risk method as taught by Messmer with the automated investment advisory method of Peters. One of ordinary skill in the art would have been motivated to do so for the benefit of, "these individual asset values are then regrouped into tranches **70**, **72**, and **74** for bid purposes" (Messmer, paragraph 0024).

With regard to Claims 8, Peters teaches where an enterprise is a single product, a group of products, a division or a company (mutual fund companies, banks) (see at least paragraph 0019).

With regard to Claims 9, 17, and 28, Peters teaches where the segments of value are selected from the group consisting of current operation, derivatives, investments, real options, market sentiment and combinations thereof (investment profile, portfolio holdings) (see at least the Abstract).

With regard to Claims 10, Peters teaches where the current operation segment of value can be further subdivided by component of value where the components of value are revenue, expense or capital charge (asset levels, expense ratio) (see at least paragraphs 0028-0030).

With regard to Claim 18, Peters teaches wherein one or more risks (risk profile 510) are selected from the group consisting of variability risks, contingent liabilities, strategic risks, market volatility risks, event risks and combinations thereof (investment risk, stocks, fund, investment risk classification) (see at least paragraphs 0084-0091).

With regard to Claim 19, Peters teaches wherein **one or more** external factors are selected from the group consisting of numerical indicators of conditions external to the organization (Latin American investments), numerical indications of prices external to the organization, numerical indications of organization conditions compared to external expectations of organization condition (total fund share value **1116**), numerical indications of the organization performance compared to external expectations of organization performance (portfolio holdings summary) and combinations thereof (see at least paragraphs 0081-0090).

With regard to Claim 26, Peters teaches *implementing the one or more changes in an automated fashion* (automated investment advisory system, recommends portfolio changes) (see at least paragraph 0020).

With regard to Claim 27, Peters teaches where implementation includes activities that are selected from the group consisting of narrow system (relational database 118) changes, changes in operation (market capitalization) and combinations thereof (see at least paragraphs 0057-0062).

Art Unit: 3623

### Conclusion

**12.** The following prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- Keyes et al. (U.S. Pub. No.2002/0116309) discloses methods and systems for efficiently sampling portfolios for optimal underwriting.
- Bjorgan et al., "Financial Risk Management in a Competitive Electricity Market", IEEE
  Transactions of Power Systems, Vol. 14, No. 4, November 1999, discloses solutions for
  electricity producers in the field of financial risk management for electric energy contract
  evaluation.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to THOMAS MANSFIELD whose telephone number is (571)270-1904. The examiner can normally be reached on Monday-Thursday 8:30 am-6 pm, alt. Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Beth Van Doren Boswell can be reached on 571-272-6737. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3623

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. M./ Examiner, Art Unit 3623

29 July 2008 Thomas Mansfield

/Andre Boyce/ Primary Examiner, Art Unit 3623